

DERWENT-ACC-NO: 2000-118824

DERWENT-WEEK: 200221

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TITLE: Quartz glass arc tube and pinch seals for an arc discharge lamp

INVENTOR: FUKUYO, T; IRISAWA, S ; OHKAWAI, N ; OHSHIMA, Y

PATENT-ASSIGNEE: KOITO MFG CO LTD[KOIT]

PRIORITY-DATA: 1998JP-0179493 (June 26, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
GB 2338823 A	December 29, 1999	N/A	021	H01J 061/36
US 6354900 B1	March 12, 2002	N/A	000	H01J 009/32
DE 19928996 A1	December 30, 1999	N/A	000	H01J 061/36
JP 2000011955 A	January 14, 2000	N/A	007	N/A
GB 2338823 B	June 13, 2001	N/A	000	H01J 061/36

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
GB 2338823A	N/A	1999GB-0014604	June 22, 1999
US 6354900B1	N/A	1999US-0336966	June 21, 1999
DE 19928996A1	N/A	1999DE-1028996	June 24, 1999
JP2000011955A	N/A	1998JP-0179493	June 26, 1998
GB 2338823B	N/A	1999GB-0014604	June 22, 1999

INT-CL (IPC): H01J009/32, H01J061/36

ABSTRACTED-PUB-NO: GB 2338823A

BASIC-ABSTRACT:

NOVELTY - An arc tube has a pair of molybdenum foils (12) that pinch sealed at both ends with a spherical portion (4a) of quartz glass tube in between. The

*Can this "frame"
be used?*

surface roughness of the molybdenum foils and the glass tube is no less than 1 micro m (reference of 0.08 mm) at a ten point average roughness.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM describes a method for fabricating the tube such that the gas pressure in the tube is 100 torr or less. Preferably the pinch seal is heated to 2000-2300 deg. C.

USE - Arc discharge lamps.

ADVANTAGE - The tube does not suffer from exfoliation between the molybdenum foil and glass in the pinch seals.

DESCRIPTION OF DRAWING(S) - The drawing shows a completed arc tube and the arc tube being pinch sealed.

Molybdenum foils 12

Spherical portion 4a

ABSTRACTED-PUB-NO: GB 2338823B

EQUIVALENT-ABSTRACTS:

NOVELTY - An arc tube has a pair of molybdenum foils (12) that pinch sealed at both ends with a spherical portion (4a) of quartz glass tube in between. The surface roughness of the molybdenum foils and the glass tube is no less than 1 micro m (reference of 0.08 mm) at a ten point average roughness.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM describes a method for fabricating the tube such that the gas pressure in the tube is 100 torr or less. Preferably the pinch seal is heated to 2000-2300 deg. C.

USE - Arc discharge lamps.

ADVANTAGE - The tube does not suffer from exfoliation between the molybdenum foil and glass in the pinch seals.

DESCRIPTION OF DRAWING(S) - The drawing shows a completed arc tube and the arc tube being pinch sealed.

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Spherical portion 4a

US 6354900B

NOVELTY - An arc tube has a pair of molybdenum foils (12) that pinch sealed at both ends with a spherical portion (4a) of quartz glass tube in between. The surface roughness of the molybdenum foils and the glass tube is no less than 1 micro m (reference of 0.08 mm) at a ten point average roughness.

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DESCRIPTION OF DRAWING(S) - The drawing shows a completed arc tube and the arc tube being pinch sealed.

Molybdenum foils 12

Spherical portion 4a

CHOSEN-DRAWING: Dwg.1,3c/8

TITLE-TERMS: QUARTZ GLASS ARC TUBE PINCH SEAL ARC DISCHARGE LAMP

DERWENT-CLASS: L03 X26

CPI-CODES: L03-C03;

EPI-CODES: X26-A02A1;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2000-036644

Non-CPI Secondary Accession Numbers: N2000-090049